

WE CLAIM:

1. A method for configurable dynamic telematic retrieval of vehicle system performance information, comprising:
 - 5 receiving vehicle performance data at a telematics device from at least one vehicle system;
 - processing the received vehicle performance data at the telematics device;
 - producing vehicle system performance information based on the
 - 10 processed vehicle performance data; and
 - communicating the vehicle system performance information to a service provider.
2. The method of claim 1 wherein processing the received vehicle system performance data comprises:
 - 15 evaluating the received vehicle system performance data; and
 - storing the evaluated vehicle system performance data.
3. The method of claim 2 wherein evaluating the received vehicle system performance data comprises:
 - 20 comparing the received vehicle system performance data from each vehicle system to an expected vehicle system performance data range;
 - flagging the vehicle system performance data as valid when the vehicle system performance data is within an expected vehicle system
 - 25 performance range; and
 - flagging the data as invalid when the vehicle system performance data is not within an expected vehicle system performance range.

4. The method of claim 2 wherein producing the vehicle system performance information comprises:

- 5 retrieving the evaluated vehicle system performance data;
analyzing the evaluated vehicle system performance data; and
storing the analyzed vehicle system performance data as vehicle system performance information.

5. The method of claim 1 further comprising:

- 10 receiving a vehicle system performance analysis configuration from a service provider;
storing the vehicle system performance analysis configuration at the telematics device;
wherein vehicle performance information is produced at the
15 telematics unit based on the stored vehicle system performance analysis configuration.

6. The method of claim 1 wherein communicating the vehicle system performance information comprises:

- 20 detecting a vehicle system performance information upload trigger;
and
initiating at least one communication session with the service provider responsive to detecting the vehicle system performance information upload trigger.

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7. The method of claim 6 further comprising:
receiving at least one vehicle system performance information
request from the service provider; and
5 sending vehicle system performance information to the service
provider responsive to the request.

8. The method of claim 7 further comprising:
receiving updated vehicle system performance information upload
10 triggers from the service provider; and
storing the updated vehicle system performance information upload
triggers at the telematics device.

9. The method of claim 6 further comprising:
15 transmitting vehicle system performance information to the service
provider responsive to initiating the at least one communication session.

10. The method of claim 6 wherein the vehicle system performance
data is selected from the group consisting of:
20 vehicle engine emission data, vehicle powertrain data, vehicle
chassis data, vehicle body data, and vehicle information and entertainment
system data.

11. A computer readable medium storing a computer program comprising:

- 5 computer readable code for directing a reception of vehicle performance data at a telematics device from at least one vehicle system;
- computer readable code for processing the received vehicle performance data at the telematics device;
- computer readable code for producing vehicle system performance information based on the processed vehicle performance data; and
- 10 computer readable code for directing a communication of the vehicle system performance information to a service provider.

12. The computer readable medium of claim 11 wherein computer readable code for processing the received engine data comprises:

- 15 computer readable code for evaluating the received vehicle system performance data; and
- computer readable code for storing the evaluated vehicle system performance data.

13. The computer readable medium of claim 12 wherein computer readable code for evaluating the received emission data comprises:

5 computer readable code for comparing the received vehicle system performance data from each vehicle system to an expected vehicle system performance data range;

computer readable code for flagging the vehicle system performance data as valid when the vehicle system performance data is within an expected vehicle system performance range; and

10 computer readable code for flagging the data as invalid when the vehicle system performance data is not within an expected vehicle system performance range.

14. The computer readable medium of claim 12 wherein computer readable code for producing the emission analysis data comprises:

15 computer readable code for retrieving the evaluated vehicle system performance data;

computer readable code for analyzing the evaluated vehicle system performance data; and

20 computer readable code for storing the analyzed vehicle system performance data as vehicle system performance information.

15. The computer readable medium of claim 11 further comprising:

computer readable code for directing a reception of a vehicle
system performance analysis configuration from a service provider;

5 computer readable code for storing the vehicle system performance
analysis configuration at the telematics device;

wherein vehicle performance information is produced at the
telematics unit based on the stored vehicle system performance analysis
configuration.

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16. The computer readable medium of claim 15 wherein computer
readable code for directing the communication of performance information
comprises:

computer readable code for detecting a vehicle system

15 performance information upload trigger; and

computer readable code for initiating at least one communication
session with the service provider responsive to detecting the vehicle system
performance information upload trigger.

20 17. The computer readable medium of claim 16 further comprising:

computer readable code for directing a reception of at least one
vehicle system performance information request from the service provider; and

computer readable code for sending vehicle system performance
information to the service provider responsive to the request.

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18. The computer readable medium of claim 17 further comprising:
computer readable code for storing updated engine emission
performance data upload triggers received from the service provider.

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19. The computer readable medium of claim 16 further comprising:
computer readable code for directing a transmission of vehicle
system performance information to the service provider responsive to initiating
the at least one communication session.

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20. A system for configurable dynamic telematic retrieval of vehicle
system performance information comprising:

means for receiving vehicle performance data at a telematics
device from at least one vehicle system;

15 means for processing the received vehicle performance data at the
telematics device;

means for producing vehicle system performance information
based on the processed vehicle performance data; and

20 means for communicating the vehicle system performance
information to a service provider.